Although research suggests that the supervisory and feedback systems in place in many districts do little to systematically enhance teacher expertise (Toch & Rothman, 2008; Weisberg, Sexton, Mulhern, & Keeling, 2009), fortunately we can develop expertise through deliberate practice (Ericsson, Krampe, & Tesch-Romer, 1993). Deliberate practice involves more than just repetition; it requires activities that are designed to improve performance, challenge the learner, and provide feedback.

What It Looks Like in Schools

Working with teachers at all grade levels across the United States, I have found that deliberate practice, when applied to teaching, has four major components (Marzano, Frontier, & Livingston, in press).

A Common Language of Instruction

All teachers and administrators in a district or school should be able to describe effective teaching in a similar way. This common language must not devolve into a simple checklist of strategies to use in the classroom and should be comprehensive enough to reflect the diversity of behaviors that can positively affect student learning (City, Elmore, Fiarman, & Teitel, 2009; Marzano, 2009).

I have designated 41 types of strategies that a comprehensive language of instruction should include (Marzano, 2007). These strategies fall into three general categories: routine strategies, content strategies, and strategies enacted on the spot.

**Routine strategies** (see fig. 1) include five strategy types that focus on communicating learning goals (through rubrics, for example); tracking student progress; celebrating student success; and establishing and maintaining rules and procedures.

![Figure 1. Routine Strategies](image)

**Communicating Learning Goals, Tracking Student Progress, and Celebrating Success**

1. Providing clear learning goals and scales (rubrics)
2. Tracking student progress
3. Celebrating success

**Establishing and Maintaining Classroom Rules and Procedures**

4. Establishing classroom rules and procedures
5. Organizing the physical layout of the classroom


The 18 types of content strategies (see fig. 2) help students interact with new knowledge (such as by chunking content into "digestible bites"); practice and deepen their understanding of new knowledge (such as by examining similarities and differences); and generate and test hypotheses about new knowledge.
Figure 2. Content Strategies

Helping Students Interact with New Knowledge
1. Identifying critical information
2. Organizing students to interact with new knowledge
3. Previewing new content
4. Chunking content into “digestible bites”
5. Processing new information
6. Elaborating on new information
7. Recording and representing knowledge
8. Reflecting on learning

Helping Students Practice and Deepen Their Understanding of New Knowledge
9. Reviewing content
10. Organizing students to practice and deepen knowledge
11. Using homework
12. Examining similarities and differences
13. Examining errors in reasoning
14. Practicing skills, strategies, and processes
15. Revising knowledge

Helping Students Generate and Test Hypotheses about New Knowledge
16. Organizing students for cognitively complex tasks
17. Engaging students in cognitively complex tasks involving hypothesis generation and testing
18. Providing resources and guidance


Strategies enacted on the spot (see fig. 3) are those that a teacher might not have planned to use in a given lesson or on a given day but which are helpful to have on hand if needed. These 18 types of strategies focus on engaging students (for example, by using academic games); acknowledging adherence or lack of adherence to rules and procedures; building relationships with students; and communicating high expectations for all students (for example, by asking questions of “low-expectancy” students).
Figure 3. Strategies Enacted on the Spot

Engaging Students
1. Noticing when students are not engaged
2. Using academic games
3. Managing response rates
4. Using physical movement
5. Maintaining a lively pace
6. Demonstrating intensity and enthusiasm
7. Using friendly controversy
8. Providing opportunities for students to talk about themselves
9. Presenting unusual or intriguing information

Acknowledging Adherence or Lack of Adherence to Rules and Procedures
10. Demonstrating "with-it-ness"
11. Applying consequences for lack of adherence to rules and procedures
12. Acknowledging adherence to rules and procedures

Establishing and Maintaining Effective Relationships with Students
13. Understanding students' interests and backgrounds
14. Using verbal and nonverbal behaviors that indicate affection for students
15. Displaying objectivity and control

Communicating High Expectations for All Students
16. Demonstrating value and respect for low-expectancy students
17. Asking questions of low-expectancy students
18. Probing incorrect answers with low-expectancy students


A Focus on Specific Strategies

A teacher, with the aid of an instructional coach or an administrator, should select a few strategies to work on as opposed to working on a wide array of strategies all at once. Each year, a teacher should select one routine strategy, one content strategy, and one strategy enacted on the spot. For example, a teacher might select a strategy for communicating clear learning goals from the general category of routines, a strategy for previewing new information from the content category, and a strategy for using academic games to engage students from the category of strategies enacted on the spot. Choosing their own strategies to work on fosters teacher ownership of the process.

Tracking Teacher Progress

Tracking teacher progress in the selected strategies requires a description of levels of performance regarding those strategies. One generic rubric that I have used measures five levels of performance. "Not using" means that the strategy is called for but the teacher is not using it. "Beginning" means that the teacher is using the strategy incorrectly or with parts missing. "Developing" means that the teacher is using the strategy with no major errors or omissions but in a mechanistic way. Level four—"applying"—is the minimum target for developing expertise. At this level, the teacher not only uses the strategy without error but also monitors to see whether the strategy has the desired effect on students. At the highest level of the scale—"innovating"—the teacher knows the strategy so well that he or she has developed adaptations specific to the needs of every student in the class.

The teacher's scores may initially be quite low—either "not using" or "beginning"—because the teacher is focusing on areas that he or she would like to improve. Throughout the year, teachers can monitor their progress through self-ratings, walk-throughs conducted by administrators and instructional coaches, and comprehensive observations conducted by supervisors.
Opportunities to Observe and Discuss Expertise

This final element of deliberate practice refers to activities that enable teachers to observe other teachers—not for the purpose of evaluation but to see other teaching strategies and compare them with their own in hopes of gleaning new insights into effective classroom practice. Activities might include making rounds to other teachers' classrooms or videotaping expert applications of specific strategies. This component also includes structured opportunities for teachers to discuss effective teaching. Teachers with demonstrated expertise in specific strategies might conduct professional development days, function as coaches and mentors, and use technology-based asynchronous discussions to encourage further insights among their colleagues.

Building Expertise

Expertise does not happen by chance. It requires deliberate practice. Districts and schools can help teachers gain expertise in the pedagogical skills of their craft if they provide a structured process that includes these four components.

References


Endnote

1 For specific strategies that fall under each category type, see Effective Supervision: Applying The Art and Science of Teaching by Marzano, Frontier, & Livingston (in press) or An Observational Protocol Based on The Art and Science of Teaching (2010) by Marzano Research Laboratory.

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